Sept 8 Hidonly \*123430\*

W	ork	Orde	r ID	123	430
¥ 7	UIN	Oluc	ıw	140	TUU

Thursday, Augus	st 07, 2014 1	1:15:24 AM									
Item ID: Revision ID:	D3391-023			Accept	*N900	<b>)</b> 040	100	<b>)*</b> s	etup Star Sto	1.71	S1* S2*
Item Name: Start Date: Required Date: Reference:	Mid Tube Ass 7/29/14 8/07/14	Start Qty: 1.00 Req'd Qty: 1.00	*1 <sup>2</sup>		Cust Item Customer:						<b>⊃</b> /"
Approvals:	Process Pla	an: MLS	Date: \\\ O\	Tooling:  SPC (Y/N):	Date:			R	tun Star Stop	^I/J	R1*
Sequence ID/ Work Center II	.,	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Rev	vision Nbr									
D3391	I				/						
*1 AA* Skidtubes Skidtubes	045 709 988 14.09.20	2-Drill pile saddle hole 3-Open sa "J"  4-Remove 5-Remove 6-Deburr  -Drill #30 paint marl ***DO No	e on one side only as peddles and GHW holes  .030" from Fwd index indexing ridge on Fwd 0 pilot holes using weaker, OT DRILL HOLES #3 earplate holes of D339 as per Dwg D3391	(Do not drill "B" holes) and driller Dwg D3391 to Ø0.55" exept for fwd saddle ing Ridge as per Dwg D3391 d & Aft end of skidtube as per Dwg trplate Jig DT8217 Identify Ø0.219-20 FROM FWD END OF JIG 1-023 assembly detail section G-	hole of detail  wg D3391  50" holes with  G  G to Ø0.250"		BE14	-08-Z	7		
· .	14,08,2	(20 110100)	as per Dwg D3391	1-023 assembly detail section H-	H to Ø0.297"						

DQA:			Date:				DART						
QA Closed:			Date:			WORK ORDER NON	I-CC	ONFO	RMANCE / UF		/ork Order up	odate only	AEROS PACE
						DISPOSITION				······································	EPARTMENT	·	
Work Orde	r: _						٦				` ¬	·	- · · —
						Rework	-		Skid-tube	Crosstube Small Fab		Water Jet d. Eng. Coor.	Engineering
Part N	0.			•		Scrap	-		Machining	Quality Other			
NCR N	lo.	•				Use-as-is Suspected Unapproved	-	inern	noforming Large Fab	Finishing Composite	Recysion	re/Packaging Supplier	- Other
	•					<u> </u>	_				<b></b>	·	
Root					Desc	ription of work order update		nitial	Acti		Sign &		
Cause	_	Date	Step	Qty		or non-conformance	Ch	ief Eng	Descri	iption	Date	Verification	QC Inspector
Design													
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Handling/Pre	_												,
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Unapproved					<u></u>		Ш.	- <del>-</del>			<u></u>	<u></u>	
			<u> </u>				FA	ULT CA	TEGORY				<del></del>
Landir	_	1			Γ	· General		1		<u></u>	٦	г	7
		Bending			<u> </u>	Bend	<u> </u>	4	Program	-	Outside Dim	<u> </u>	Pressure/Forced
		Centre No	ot Concer	itric	-	BOM/Route	<u> </u>	Grain		-	Over/Under	<del> </del>	Set-up
}		Cracks			<u> </u>	Broken/Damage/Defect	$\vdash$	Hardwa		<u> </u>	Part Incorre		Temperature/Cure
	_	Crimp/Kii	nk/Ripple	/Wave	-	Burrs	<u> </u>	4 '	ion Incomplete/Un	· —	Part Lost/M	· ·	Weld
		Cuffs			-	Contamination	$\vdash$	4	tions Incomplete/U	Inclear	Part Moved	<u> </u>	Wrong Stock Pulled
		Crushing			_	Countersink	<b>_</b>	-1	gned/off center	<u> </u>	Positioned V		ii
[ ]		Heat Trea			_	Cut Too Short	<u> </u>	Mislabe		L	Power Loss/	Surge 🛴 📙	Other
[		Inspectio	-	Tube		Drawing		Misread					
		Marks/Ch				Drill Holes	_	Off-set					
		Turning S				Finish	_	-4	Calibration				
1		IM/ave/Tu	list in Tub	10		Fit/Function	- 1	10ut of	Saguence	_			

Thursday, August	t 07, 2014 11:	15:24 AM									
Item ID: Revision ID:	D3391-023			Accept	*N900	040	100	<b>)*</b> s	Setup Sta	1 1	S1*
Item Name:	Mid Tube Asser	nbly							Sto	ob */	<b>IS2</b> *
Start Date:	7/29/14	Start Qty: 1.00	*1*		Cust Item ]	ID:					
Required Date:	8/07/14	<b>Req'd Qty:</b> 1.00	*1*		Customer:						
Reference:							_	TO TO	tun Sta	ort	
Approvals:	Process Plan	•	Date: Tooling:		Date:			ľ		~1/	R1*
	QC:		Date:	SPC (Y/N):	D	ate:			Ste	<sub>ոհ</sub> ⊁//	R2*
Sequence ID/ Work Center ID		Operation Description		Set Up/ Run Hours	Tool ID	Tool#	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
	Jrd.	remaining f dia hole, usi tranfer drille D3391-021  13- Wsing T wearplate ho  14- Locatin wearplte ho  15- Open 10  16- insert T  18- ON FIR as per  8 19- ON 2N	wd saddle holes using Eng t-pins and clicos to ed pilot holes in D3391-BATCH:  T78217, locating from toles into D3391-021.  In g from two fwd wearplates in D3391-021 using the wearplate holes in D3391-021 with the company of the pins-into-first-and-third and the company of th	391-021 to 0.297" dia.	rill remaining  remaining 6  holes to 0.500"	D. M.	Rigor	N 14	Pho 1-9-	I tu	

DQA:			_ Date: ˌ												
						WORK ORDER NON	DER NON-CONFORMANCE / UPDATE								
QA Closed:			Date:			,				W	ork Order up	date only			
Work Orde	ar.					DÍSPOSITION		J. 18**	or .	AGAINST DE	PARTMENT	/PROCESS			
VVOIR OTGE					· · · ·	Rework	1		Skid-tube	Crosstube	1	Water Jet	Engineering		
Part N	lo.					Scrap		, t <sup>4</sup> )	Machining	Small Fab	Pro	d. Eng. Coor.	Quality		
	•		,			Use-as-is			noforming	Finishing	4	re/Packaging	Other		
NCR N	١o.					Suspected Unapproved	1		Large Fab	Composite	1	Supplier			
	•			7,							<b>-</b>		,		
Root	•				Desc	ription of work order update		nitial	Act	ion	Sign &				
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Descr	ription	Date	Verification	QC Inspector		
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Offset/Setup	Щ				1	,				٠.					
Process							1	•	=						
Supplier				:						·					
Training		,				*						بد خ			
Transport	Н				ľ			*							
Unapproved	<u> </u>		<u> </u>	<u>.</u>	<u> </u>		ΕΛ	III T CA.	TEGORY	· · · · · · · · · · · · · · · · · · ·		<u>.</u>			
Landi	na G		<u> </u>			General	17	OLI CA	1200KI						
Landi		Bending				Bend	Г	] Folio/F	Program		Outside Dim	ensions	Pressure/Forced		
		Centre No	ot Concer	ntric	_	BOM/Route		Grain			Over/Under	tolerance	Set-up		
		Cracks				Broken/Damage/Defect		Hardwa	are		Part Incorre	cí	Temperature/Cure		
		Crimp/Kii	nk/Ripple	/Wave		Burrs		Inspect	ion Incomplete/Ui	nqualified	Part Lost/M	issing	Weld		
						Contamination		instruc	tions Incomplete/l	Unclear	Part Moved		Wrong Stock Pulled		
	-	Crushing	e ·			Countersink		Misali	gned/off center		Positioned $\dot{V}$	Vrong	_		
Y		Heat Trea				Cut Toó Short		Mislab	eled ·		Power Loss/	'Surge	Other		
		Inspectio	n Strip in	Tube		Drawing		Misrea	d .						
		Marks/Cl	natter			Drill Holes	Off-set								
		Turning S	Sequence			Finish	Out of Calibration								
1	· -	Wave/Tu	ist in Tuk	he		Fit/Function		Out of	Sequence						

Work	Order	ID	123430
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Thursday, Augu	ıst 07, 2014 1	1:15:24 AM	·	· · · · · · · · · · · · · · · · · · ·	74.717								_
Item ID: Revision ID:	D3391-023			Accept	*N900	040	100	)*	Setup	Start	*N	S1*	
Item Name:	Mid Tube As	sembly			N.					Stop	*N.	S2*	
Start Date: Required Date	7/29/14 :: 8/07/14	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item I Customer:	ID:			•			·	
Reference: Approvals:	Process Pla	an:	Date:	Tooling:	b	ate:	<del>-</del>		Run	Start	*N	R1*	
	QC:		Date:	<b>SPC</b> (Y/N):	<b>D</b> :	ate:				Stop	*N	R2*	
Sequence ID/ Work Center I	ID	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	t Rej Qty		Reject Number	Insp. Stamp	
110		QC5- Inspect part comp	leteness to step on W/O	0.00				ì				DAS <b>38</b>	
*110* QC Quality Control		Memo		0.00				-[-				9-89 /	4-
120		Chemical Conversion C	oat per QSI005 4.1	0.00		r		ſ		ILL	9.1	11,	
*120* HandFinish Hand Finishing		Мето		0.00						_/		DA:	)
130		QC7-Inspect Chemical	Conversion Coat	0.00	•			j	G.	7	, 1	9-8 19-01	)
*130* QC Quality Control		Memo		0.00							<u>/ '                                   </u>	<u>i ou</u>	

DQA:			Date:											
م						WORK ORDER NON	ORK ORDER NON-CONFORMANCE / UPDATE  Work Order update only							
QA Closed:		•••	Date:				_		·	V	vork Order u	odate only		
Work Orde	er:					DISPOSITION				AGAINST D	EPARTMENT	/PROCESS		
	•					Rework	1		Skid-tube	Crosstube	7	Water Jet	Engineering	$\neg$
Part N	lo.					Scrap	1		Machining	Small Fab	Pro	d. Eng. Coor.	Quality	$\neg$
	•					Use-as-is	1 1		noforming	Finishing		re/Packaging	Other	7
NCR N	No.					Suspected Unapproved	1		Large Fab	Composite	7	Supplier		
	•						_					. <del></del>		
Root					Desc	ription of work order update	I	Initial Action		ion	Sign &			
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Descri	iption	Date	Verification	QC Inspect	or
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Equip/Tooling		•												
Handling/Pre														
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Process	_													
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Training	_			:										
Transport	<del>                                     </del>				ļ.						,			
Unapproved	<u> </u>	<u> </u>			<u> </u>		EA	III T CA	TEGORY			<u>.                                    </u>		
© File and:		Cons				General	FA	OLI CA	IEGORI		<del></del>			
Landi	IIIg (	Bending				Bend		leolio/E	Program	Г	Outside Din	nensions [	Pressure/Forced	i
\$15-C	$\vdash$	Centre No	nt Concer	ntric	$\vdash$	BOM/Route	$\vdash$	Grain	Togram	-  -	Over/Under	F-	Set-up	
	$\vdash$	Cracks	or concer		-	Broken/Damage/Defect	-	Hardwa	are	-	Part Incorre	F	Temperature/Cu	ure
	H	Crimp/Kir	nk/Ripple	/Wave		Burrs	$\vdash$	-	ion Incomplete/Un	gualified	Part Lost/M	<b> </b>	Weld	
	$\vdash$	Cuffs	,	,		Contamination	<u> </u>	4 '	tions Incomplete/U	· -	Part Moved		Wrong Stock Pul	lléd
		Crushing				Countersink		4	gned/off center		Positioned \	<u> </u>	<b>-</b>	•
	$\vdash$	Heat Trea	at			Cut Too Short		Mislabe	=	·  -	Power Loss,	· · · · · · · · · · · · · · · · · · ·	Other	
		Inspectio		Tube		Drawing		Misrea		_	<b>-</b>			
		Marks/Ch	•			Drill Holes		Off-set						
		Turning S				Finish		Out of	Calibration					
		Wave/Tw	ist in Tub	e		Fit/Function		Out of	Sequence					

Work Order ID 123	430
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Thursday, Augu	ust 07, 2014	11:15:24 AM		1/.	14.1(/						
Item ID: Revision ID:	D3391-023	3		Accept	*N900	<b>040</b>	100	)*	Setup Sta	147.	31*
Item Name:	Mid Tube A	ssembly								ob *//	<b>ミク*</b>
<b>Start Date:</b>	7/29/14	Start Qty: 1.00	*1*		Cust Item I	D:					
Required Date	e: 8/07/14	<b>Req'd Qty:</b> 1.00	*1*		<b>Customer:</b>						
Reference:			•					_	- G.		
Approvals:	Process P	Plan:	Date:	_ Tooling:	Da	ate:		]	Run Sta	^1V1+	<b>२1</b> *
	QC:	_	Date:	_ SPC (Y/N):	Da	ate:			Ste	<sup>₀₽</sup> *N₽	<b>32*</b>
Sequence ID/ Work Center	ID	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140				0.00				,			Λ
*140*		Skidtubes		0.00						-	<u> </u>
Skidtubes Skidtubes		2-C'sink flo 3- Prepare t 4-Bond wet Adhere for A/R Sikafle batch#: //	at bag holes as per dwg hat bag holes as per Dwg D33 hat bag holes as per			7			14	1-9-6	DA. 18
150		QC5- Inspect part comp	leteness to step on W/O	0.00				/	X	14	79-03
*150* QC		Memo		0.00					Ø		
Quality Control		7.20.110		•							

DQA:			Date:				TOART						
QA Closed:			Date:			WORK ORDER NON	-CC	ONFO	RMANCE / UI		ork Order up	odate only	AEROSPACE
		<del> </del>				DISPOSITION				AGAINST DI	PARTMENT,	/PROCESS	
Work Order	r:						,				7	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,
Part No	o. <u> </u>		······································			Rework Scrap Use-as-is			Skid-tube Machining moforming	Crosstube Small Fab Finishing		Water Jet d. Eng. Coor. re/Packaging	Engineering Quality Other
NCR No	o					Suspected Unapproved	]	THEIT	Large Fab	Composite		Supplier	
Root					Desc	ription of work order update		nitial	Act	ion	Sign &		
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Descr	iption	Date	Verification	QC Inspector
Design													
Doc/Data												2	·
Equip/Tooling	_												
Handling/Pre	_												
Material	4												
Operator								•					
Offset/Setup													
Process	4	•					İ						
Supplier	4					•							
Training	4												
Transport	_												
Unapproved					*		<u> </u>		<u></u>			. <u> </u>	
							FA	ULT CA	TEGORY			·	
Landin	_					General	_	1- " "		r	Outside Dim		Pressure/Forced
-	_	ending			-	Bend	$\vdash$	1	Program	<u> -</u>	<b>-</b>	<del>-</del>	Set-up
-	_		ot Concer	ntric		BOM/Route	<b> </b>	Grain		<u> </u>	Over/Under	<b>—</b>	Temperature/Cure
_	_	racks				Broken/Damage/Defect	-	Hardwa			Part Incorre	<del>-</del>	Weld
-			nk/Ripple	/Wave	-	Burrs	$\vdash$	4 `	ion Incomplete/Ur	· —	Part Lost/Mi	issing –	Wrong Stock Pulled
-	_	uffs				Contamination		4	tions Incomplete/l	Jnclear	Part Moved	L	
-	_	rushing			<b> </b>	Countersink	-	-	gned/off center	<b> </b>	Positioned V		Other
-	_	leat Trea		<b>T</b> l.	<u> </u>	Cut Too Short	$\vdash$	Mislab		L	Power Loss/	onige	Jouren
	_	•	n Strip in	Tube	<u> </u>	Drawing	-	Misrea					
-	_	/larks/Ch				Drill Holes	$\vdash$	Off-set					
		_	equence		_	Finish	<u> </u>	-{	Calibration				
1	Į۷	Vave/Tw	ist in Tub	e e		Fit/Function		Out of	Sequence				

Work	Order	ID	123430
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\*123430\*

Page 5

Thursday, August 07, 2014 11:15:24 AM Accept D3391-023 \*N900040100\* Setup Start Item ID: **Revision ID:** Stop Mid Tube Assembly Item Name: \*1\* **Cust Item ID:** 7/29/14 Start Oty: 1.00 **Start Date:** Req'd Qty: 1.00 Required Date: 8/07/14 \*1\* Customer: Reference: Run Start Process Plan: Date: **Tooling:** Date: **Approvals:** Stop SPC (Y/N): Date: OC: Date: Tool ID Tool # Plan Reject Reject Insp. Operation Set Up/ Accept Sequence ID/ Oty Otv Number Stamp Run Hours Code Work Center ID Description 0.00 160 Skidtubes 1 @ BE14-09-03 \*160\* 0.00 Skidtubes 1-Weld crossbolt spacer as per dwg D3391 & QSI 004 A/Rm129399 Skidtubes 2-grind weld flush DAS OC10- Inspect visual per OSI004- ground welds 0.00 170 14.09.02 \*170\* 0.00 OC Memo

180

QC5- Inspect part completeness to step on W/O

0.00

\*120\*

**Ouality Control** 

QC

Memo

0.00

Quality Control

W 14.09.03

**В**А\$

DQA:			Date:											TRAC <sup>~</sup>
			<b>.</b> .			WORK ORDER NON	-CC	ONFO	RMANCE / UP		l. Od	أ يامد حجاد		AEROSPACE
QA Closed:			Date:			<u> </u>	_			vv	ork Order up	date only		
Work Orde	ır.					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS		
Work Orac	-''-					Rework	i		Skid-tube	Crosstube		Water Jet		Engineering
Part N	lo.					Scrap		i	Machining	Small Fab	Pro	d. Eng. Coor.		Quality
						Use-as-is		Thern	noforming	Finishing	Rec/Stor	e/Packaging		Other
NCR.N	10.					Suspected Unapproved			Large Fab	Composite	]	Supplier		
Root					Desc	ription of work order update		nitial	Acti	ion	Sign &			<del></del>
Cause		Date	Step	Qty	<i>D</i> <b>C</b> 3 <b>C</b>	or non-conformance	ı	ief Eng	Descri		Date	Verification	n	QC Inspector
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		-					FA	ULT CAT	regory					
Landi	ng G	ear	-			General		_			_	1		
		Bending				Bend		Folio/F	Program		Outside Dim		—-	Pressure/Forced
		Centre No	ot Concer	ntric		BOM/Route		Grain		<u></u>	Over/Under	tolerance	-	Set-up
		Cracks				Broken/Damage/Defect	<u></u>	Hardwa	ire		Part Incorre		-	Temperature/Cure
		Crimp/Kii	nk/Ripple	/Wave		Burrs		Inspect	ion Incomplete/Un	qualified	Part Lost/Mi	issing		Weld
,		Cuffs				Contamination		4	tions Incomplete/U	Inclear	Part Moved			Wrong Stock Pulled
		Crushing			<u> </u>	Countersink		4	ned/off center		Positioned V	-	r	l
		Heat Trea	at			Cut Too Short		Mislabe			Power Loss/	Surge	Ш	Other
	-	Inspectio	-	Tube	<u> </u>	Drawing	_	Misrea						
	Marks/Chatter					Drill Holes		Off-set						
	Turning Sequence					Finish	L	4	Calibration					<u> </u>
	1	Wave/Twist in Tube				Fit/Function		Out of	Seauence					

Thursday, August 07. 2014 11:15:24 AM

nursuuy, Mugi	usi 07, 2014 1	1.15.27 AM									
tem ID: Revision ID:	D3391-023			Accept	*N900	040	100	<b>)*</b>	Setup Star	ı	S1*
tem Name:	Mid Tube Ass	sembly							Stop	, *N	S2*
Start Date:	7/29/14	Start Qty: 1.00	*1*		Cust Item I	D:					
Required Date	e: 8/07/14	<b>Req'd Qty:</b> 1.00	*1*		Customer:						
Reference:			-					_	a.		
Approvals:	Process Pla	an:	Date:	Tooling:	D:	ate:		I	Run Star	^IV	R1*
	QC:		Date:	<b>SPC</b> (Y/N):	Da	ate:			Stop	` *N	R2*
Sequence ID/ Work Center	ID	Operation Description	- · · · ·	Set Up/ Run Hours	Tool ID	Tool#	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
185		Pressure Wash per QSIO	005 4.3	0.00					n M		0 -
*125* HandFinish		Memo		0.00	·				Ha	14	9-3
Hand Finishing		AND REA	LODINE AS PER PAR	09-043							
190		White Gloss(Ref:4.3.5	1) per QSI005 4.3-Alun	n 0.00				į		<b>-</b> /	•
*190*		MIS	8909		<b>6</b>			14	14-	9-41.	<b>34.</b> 889
Powdercoat		Memo	125	0.00				. ,	- ,		
Powder Coating		OVEN TE	ME/100 - 35 MPERATURE: 35 ME: /100.	<u>D°</u>							
200		QC3- Inspect Part Finis	sh	0.00			•	ì	/	011	1 1 0
*200*				0.00				_ 1x	<u></u>	$\mathcal{M}$	14/04/6
QC		Memo		0.00	,				1		9-
Ouality Control											4.

DQA:		Da	ate: _			- DART							
						<b>WORK ORDER NON-</b>	-CC	ONFO	RMANCE / U	PDATE			AEROSPACE
QA Closed:		D	ate:								ork Order up	odate only	
Work Orde	or:					DISPOSITION		•		AGAINST D	EPARTMENT,	/PROCESS	
Work Orde	···				_	Rework	1		Skid-tube	Crosstube		Water Jet	Engineering
Part N	lo.					Scrap			Machining	Small Fab	Pro	d. Eng. Coor.	Quality
						Use-as-is		Thern	noforming	Finishing	Rec/Sto	re/Packaging	Other
NCR N	lo					Suspected Unapproved			Large Fab	Composite	]	Supplier	
Root		T.	Т		Desci	ription of work order update		nitial	Action		Sign &	<u> </u>	
Cause	Dat	e St	ep	Qty		or non-conformance	Ch	ief Eng	Descr	ription	Date	Verification	QC Inspector
Design													
Doc/Data										•			
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Transport	_				,	•	•						
Unappróved							<u>.                                    </u>					<u> </u>	
					<del></del>		FAI	ULT CAT	TEGORY	<del></del>			
Landir	ng Gear				<del></del> -	General	r—	1		۲-	<b>–</b>		7
ļ	Bendi	-			-	Bend		1	rogram		Outside Dim	<b>⊢</b>	Pressure/Forced
		e Not Co	ncen	tric	<u> </u>	BOM/Route	<u> </u>	Grain		-	Over/Under	<del> </del>	Set-up
<b>*</b> .	Cracks				⊢	Broken/Damage/Defect		Hardwa			Part Incorre	<u> </u>	Temperature/Cure
· ·	Crimp/Kink/Ripple/Wave		_	Burrs	<u> </u>	1 '	ion Incomplete/Ui	· -	Part Lost/M		Weld		
	Cuffs				<u> </u>	Contamination	$\vdash$	4	ions Incomplete/U	Jnclear	Part Moved	· · · · · · · · · · · · · · · · · · ·	Wrong Stock Pulled
	Crushing			Countersink	<u> </u>	4	ned/off center	<u> </u>	Positioned V		ا		
•	Heat Treat Inspection Strip in Tube		<u> </u>	Cut Too Short	-	Mislabe		L	Power Loss/	Surge	Other		
a >				Tube	<u> </u>	Drawing	$\vdash$	Misread	t				·· <u>-</u> ··· -
		s/Chatte			<u> </u>	Drill Holes	$\vdash$	Off-set	- 111				
	Turning Sequence				<u> </u>	Finish	<u> </u>	4	Calibration				
	Wave/Twist in Tuhe				- 1	Fit/Function	1	IOut of 9	Sequence				

Work Ord Thursday, Augu					Page 7								
Item ID: Revision ID: Item Name: Start Date: Required Date	D3391-023  Mid Tube As 7/29/14  : 8/07/14	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*	Accept	*N900  Cust Item I Customer:		100	<b>)*</b>	_	Start Stop		S1* S2*	_
Reference: Approvals:	Process Pl	an:	Date:	Tooling: SPC (Y/N):	D:		F		Start Stop	*N	R1* R2*		
Sequence ID/ Work Center I 230 *20* HandFinish Hand Finishing		,		Set Up/ Run Hours 0.00 0.00 9416 starting from 0.500" st	Tool ID	Tool#	Plan Code	Accept Qty	Reject Qty		Reject Number	Insp. Stamp	
240 <b>*240*</b> QC		2-Install Ins  QC5- Inspect part comp	erts as per Dwg . leteness to step on W/O	0.00	ø							DAS 38 9-89 / 4 -4	9

250

Identify as per dwg & Stock Location:

0.00

DAS 06 9-89

\*950\* Packaging

Quality Control

ckaging

Memo

0.00

SEP 0 5 2014

Packaging

DQA:			Date:										TAAG"	
OA Clasadi			Date:			WORK ORDER NON	-CC	ONFO	RMANCE / UF		ork Order up	date only - F		AEROSPACE
QA Closed:			Date.						·					
Work Orde	er:					DISPOSITION				AGAINST D	EPARTMENT,	PROCESS		
	•				_	Rework			Skid-tube	Crosstube	1	Water Jet		Engineering
Part N	lo.					Scrap			Machining	Small Fab	Pro	d. Eng. Coor.		Quality
	•					Use-as-is		Thern	noforming	Finishing	Rec/Stor	e/Packaging		Other
NCR N	lo.				_	Suspected Unapproved			Large Fab	Composite		Supplier		
Root					Desc	ription of work order update		nitial	Acti	on	Sign &		٦	
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Descri	iption	Date	Verification		QC Inspector
Design												· · · · · · · · · · · · · · · · · · ·		
Doc/Data													1	
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Process							1						ļ	
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Training :→ Transport -													١	
Unapproved	•					¢								•
Oliappioved			<u>.                                    </u>	<u>                                     </u>	<u> </u>		FA!	ULT CA	TEGORY		<u>l.</u>			
Landii	ng (	 Gear				General								
		Bending				Bend		Folio/F	Program		Outside Dim	ensions		Pressure/Forced
		Centre No	ot Concer	ntric		BOM/Route		Grain			Over/Under	tolerance		Set-up
		Cracks				Broken/Damage/Defect -		Hardwa	are		Part Incorred	ાં [		Temperature/Cure
		Crimp/Kir	nķ/Ripple	/Wave		Burrs		Inspect	ion Incomplete/Un	qualified	Part Lost/Mi	ssing		Weld
		Cuffs		•		Contamination		Instruc	tions Incomplete/U	Inclear	Part Moved	<u>.</u>		Wrong Stock Pulled
		Crushing				Countersink		Misali	gned/off center		Positioned V			
		Heat Trea	at			Cut Too Short		Mislabe	eled		Power Loss/	Surge		Other
		Inspectio	n Strip in	Tube		Drawing		Misrea	d					
		Marks/Ch	natter			Drill Holes		Off-set				<del></del>		
		Turning S	equence			Finish		Out of	Calibration					
	l	Wave/Twist in Tube				Fit/Function		Out of	Sequence					

Work Ord				*12:				Page		
Item ID: Revision ID: Item Name:	D3391-023			Accept	*N90004	<b>0100</b>	*	Setup Start Stop	I VI V	S1*
Start Date: Required Date Reference:	7/29/14 :: 8/07/14	Start Qty: 1.00 Req'd Qty: 1.00	*1 *1		Cust Item ID: Customer:		Run Start			
Approvals:	Process Plan:QC:		Date:	Tooling: SPC (Y/N):	Date:				,	२1* २2*
Sequence ID/ Operation Work Center ID Description				Set Up/ Run Hours	Tool ID Tool		Accept Qty	Reject Qty	Reject Number	Insp. Stamp

0.00

0.00

QC21- Final Inspection - Work Order Release

Memo

260

\*260\*

Quality Control

Page 8

MUJ 1409-05 MUJ 1409-05

DQA:			Date:			WORK ORDER WON CONTORNATION / URDATE							"DART
QA Closed:			Date:			WORK ORDER NON-	-CC	ONFO	RMANCE / UF		ork Order up	date only	T AERŌSPĀCĒ
						DISPOSITION				AGAINST DE			:
Work Orde Part N  NCR N	lo					Scrap   Machining   Small Fab   Prod. Eng. Coo Use-as-is   Thermoforming   Finishing   Rec/Store/Packagir Suspected Unapproved   Large Fab   Composite   Supplie						Engineering Quality Other	
Root					Desc	ription of work order update		nitial	Acti	ion	Sign &		
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Descri	iption	Date	Verification	QC Inspector
Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training Transport Unapproved									·				
	or						FA	ULT CA	regory				· · · · · · · · · · · · · · · · · · ·
Landir		Gear  Bending  Centre Not Concentric  Cracks  Crimp/Kink/Ripple/Wave  Cuffs  Crushing  Heat Treat  Inspection Strip in Tube  Marks/Chatter  Turning Sequence				General Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes		Folio/Program Grain Hardware Inspection Incomplete/Unqualified Instructions Incomplete/Unclear Misaligned/off center Mislabeled Misread Off-set  Outside Dimensions Over/Under tolerance Part Incorrect Part Lost/Missing Part Moved Positioned Wrong Power Loss/Surge					Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled Other
		Turning S Wave/Tw				Finish Fit/Function	L	-	Calibration Sequence				

Thursday, August 07, 2014 11:15:24 AM

Work Order ID: 123430

\*123430\*

Parent Item:

D3391-023

\*D3391-023\*

Parent Item Name: Mid Tube Assembly

**Start Date:** 7/29/14

Required Date: 8/07/14

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP A05.10.20New Issue

KJ/EC

IPP B06.02.10ECN773 dwg rev.D EC

IPP C 07.03.20 rev F dwg

EC

IPP D 07.03.28 re-format

EC

IPP E 07.10.31 ecn 1053P

EC

IPP Rev:F ECN 1056 07-11-13 DD

verified by: EC

IPP Rev:G 08-09-08 new process (ecn 08-510) DD verified by:EC

IPP Rev:H 08-09-10 revH as per dwg DD verified by:EC

IPP Rev: I 08-11-13 Removed steps per w/o, QC KJ verified by: ec Rev:J add in seq 140 expire date &b# sikaflex DD 10.02.17 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per K	it Total Qty	Qty Issued	Date Status Issued
D2500-1-100		Manufactured	No			100	Each	67.0000	1	1		
*D2500-1	-100*								**			BE 14-108-20
-				<b>Location</b>	ı	Loc	<u>Oty</u>	Loc Code				
				HALL	)		67	,			_	
				(	82373 86065		14 53				_	
D3389-1		Manufactured	No			140	Each	2.0000	1	1		
*D3389-1	*								**			
Web		•										11
•				Location		Loc		Loc Code			14_	9-2///
				LG002	115652	ノ	2 2			U	_ / /-	· YXII
D3681-1		Manufactured	No		114909	160	Each	65.0000	5	5		
*D3681-1	*								**		•	BE14-09-1
Spacer								•				30.10/
				Location	<u>1</u>	Loc	Oty	Loc Code				
	•			LG001			65		•		_	

57

DQA:			_ Date:											
QA Closed:			Date:			WORK ORDER NON-	-CC	ONFO	RMANCE / UPDATE	W	ork Order up	date only	7	AEROSPACE
						DISPOSITION			AGAINS		PARTMENT			
Work Orde	er:	·				Distribut				_	. ,,		<del></del> 1	<b></b>
						Rework			Skid-tube Crosstub	_		Water Jet	4	Engineering
Part N	١٥.		· · · · · · · · · · · · · · · · · · ·			Scrap			Machining Small Fa		•	d. Eng. Coor.	_	Quality
	_					Use-as-is		Thern	noforming Finishin	~—	Rec/Stor	e/Packaging	_	Other
NCR 1	۱o.					Suspected Unapproved			Large Fab Composit	e	l	Supplier		
Root				<del></del>	Desc	ription of work order update		nitial	Action		Sign &	· · · · · · · · · · · · · · · · · · ·		
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Description		Date	Verification	_	QC Inspector
Design								•						
Doc/Data						,							1	
Equip/Tooling														
Handling/Pre														
Material														
Operator														
Offset/Setup														
Process													-	
Supplier												·	ŀ	
Training Transport														
Unapproved				6	ľ								-	
		L	1				FA	ULT CA	regory	-				
Landi	ng (	Gear				General								
		Bending				Bend		Folio/F	Program		Outside Dim	ensions	F	Pressure/Forced
		Centre N	ot Concer	ntric		BOM/Route	Г	Grain			Over/Under	tolerance	_]{	Set-up
		Cracks				Broken/Damage/Defect	-	Hardwa	nre		Part Incorre	cí [	1	Temperature/Cure
		Crimp/Kink/Ripple/Wave				Burrs		Inspect	ion Incomplete/Unqualified		Part Lost/Mi	ssing	╝	Weld
		Cuffs				Contamination		Instruct	tions Incomplete/Unclear		Part Moved		\	Wrong Stock Pulled
	Crushing					Countersink		]Misalig	gned/off center		Positioned V	Vrong		
	Heat Treat					Cut Too Short		Mislabe	eled		Power Loss/	Surge	(	Other
	Inspection Strip in Tube					Drawing		Misrea	d					
	Marks/Chatter					Drill Holes		Off-set						
	Turning Sequence					Finish		Out of	Calibration					····
		Wave/Tw	vist in Tub	oe		Fit/Function		Out of	Sequence					

Thursday, August 07, 2014 11:15:24 AM

Work Order ID: 123430

Parent Item Name: Mid Tube Assembly

\*123430\*

Parent Item:

D3391-023

\*D3391-023\*

Start Date: 7/29/14

Required Date: 8/07/14

Start Oty: 1.00

Required Otv: 1.00

94,0000

nAS

10 89ـه

D3591-1

rManufactured

Location Loc Qty FG 10 115645 92873 6 FP 84 115533 58 121446 26 230

Loc Code

20

ALS4-1032-130

AELS4-1032-130 Purchased

No

5,259,000 Each

Each

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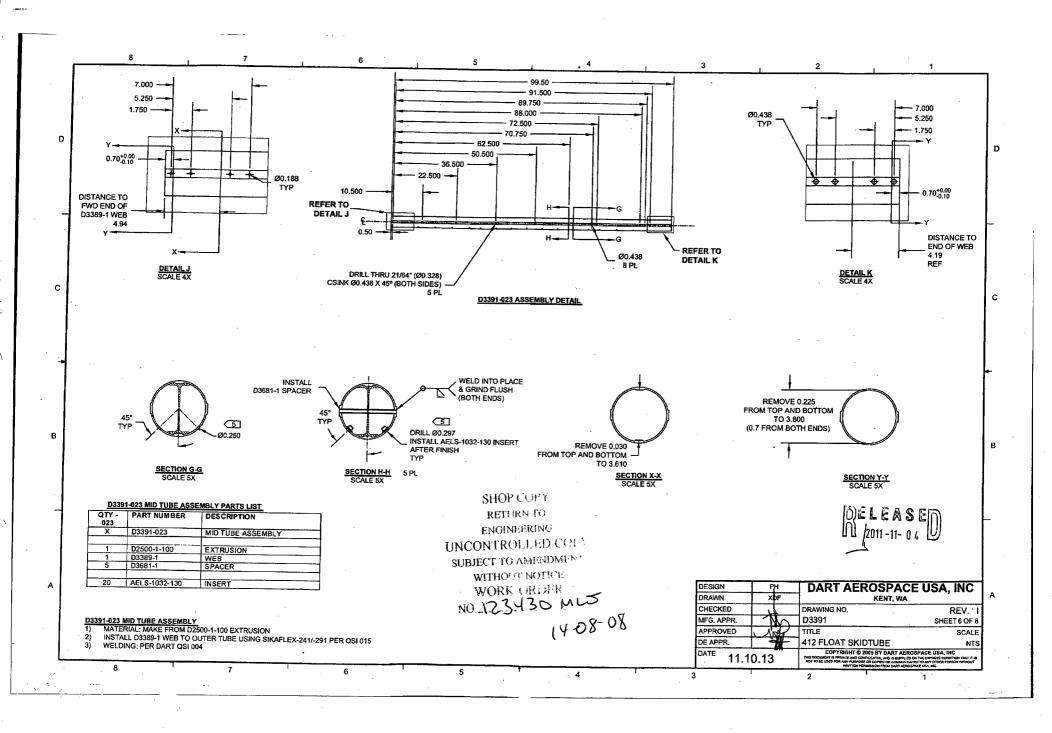
\*ALS4-1032-130\*

Rivnut

Location	Loc Qty	Loc Code	
ST267	5259		
M126109	57		
M128211	48		
M128649	5154	•	<u> X2()</u>

1x D4095-045 {WERRPHIE ASSY CENTERS 13/115940 124 AN3C-4A/M129520 (botts) 121 NAS 1149CO 332R/M112740 (WASher

DQA:		_ Date:											
					WORK ORDER NON	-CC	ONFO	RMANCE / UI				AEROSPACE	
QA Closed:		Date:							. W	ork Order up	date only		
Work Orde	er:			i	DISPOSITION		· · ·		AGAINST D	EPARTMENT	/PROCESS		
					Rework	1		Skid-tube	Crosstube	7	Water Jet	Engineering	
Part N	lo				Scrap			Machining	Small Fab	-	d. Eng. Coor.	Quality	
NCR N	lo	· <u>.</u>			Use-as-is Suspected Unapproved		Therr	noforming Large Fab	Finishing Composite	Rec/Stor	re/Packaging Supplier	Other	
Root				Desc	ription of work order update	Ī	nitial	Act	ion	Sign &			
Cause	Date	Step	Qty		or non-conformance	Ch	ief Eng	Descr	iption	Date	Verification	QC Inspector	
Design					3					'			
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Equip/Tooling		.,,,,											
Handling/Pre	<u> </u>										•,		
Material											· ×	*	
Operator		}		Ì								`	
Offset/Setup	<i></i>										`		
Process													
Supplier	-				•		ĺ					<b>'</b>	
Training					Č							ě	
Transport		1			* * * * * * * * * * * * * * * * * * *			. `	;			7	
Unapproved						<u> </u>		<u> </u>					
						FA	ULT CA	TEGORY			·		
Landir	ng Gear		•		General		,	•		_		<b>-</b>	
,	Bending				Bend		1 .	Program	_	Outside Dim	<del>  -</del>	Pressure/Forced .	
-	Centre N	ot Conce	ntric	_	BOM/Route	<u></u>	Grain		, ·	Over/Under	<del></del>	Set-up	
,	Cracks			<u> </u>	Broken/Damage/Defect		Hardwa		<u>_</u>	Part Incorre		Temperature/Cure	
	Crimp/Ki	Crimp/Kink/Ripple/Wave Burrs						ion Incomplete/Ur	<u> </u>	Part Lost/M	<del></del>	Weld	
	CuffsContamination				4		4	tions Incomplete/l	Jnclear	Part Moved	<u></u>	Wrong Stock Pulled	
				Countersink		4	gned/off center	<u> </u>	Positioned V		<b>-</b> .		
	Heat Treat Cut Too Short				4	Mislabeled Power Loss/Surge					Surge	Other	
]					Drawing	Misread							
ļ	Marks/Chatter Drill Holes					Off-set							
ļ	Turning Sequence Finish						-1	Calibration -					
	Wave/Tv		Fit/Function	Out of Sequence									



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